

REMARKS

This is a full and timely response to the outstanding final Office Action mailed April 8, 2005. Reconsideration and allowance of the application and pending claims are respectfully requested.

I. Claim Rejections - 35 U.S.C. § 112, Second Paragraph

Claim 40 has been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. In particular, the Examiner states that claim 40 is ambiguous because of its use of the term “substantially”.

Applicant notes that the Court of Appeals for the Federal Circuit (the “Federal Circuit”) has held on multiple occasions that relative terms are not *per se* improper or indefinite. For instance, in *Andrew Corp. v. Gabriel Electronics, Inc.*, 847 F.2d 819, 6 USPQ2d 2010 (Fed. Cir. 1988), *cert. denied*, 488 U.S. 927 (1988), the Court commented that such words are “ubiquitous in patent claims. Such usages, when serving reasonably to describe the claimed subject-matter to those of skill in the field of the invention, and to distinguish the claimed subject matter from the prior art, have been accepted in patent examination and upheld by the courts.” *Id.*, 847 F.2d at 821, 6 USPQ2d at 2012.

Further support for the proposition that relative terms are not by definition indefinite may be found in the following cases: *Seattle Box Co., Inc. v. Industrial Crating & Packaging, Inc.*, 756 F.2d 1574 (Fed. Cir. 1985)(held that words of degree in the claims were not indefinite because the specification provided an indication as to how to measure that degree); *Rosemont, Inc. v. Beckman Instruments, Inc.*, 727 F.2d 1540 (Fed. Cir. 1984)(held that relative terminology was not indefinite even though

the terminology was not precisely defined in the specification); *U.S. v. Telectronics*, 857 F.2d 778 (Fed. Cir. 1988)(held that relative terminology was not indefinite because the Patent Act only requires “reasonable precision” in delineating the bounds of the claimed invention); *Modine Mfg. Co. v. U.S. Int’l Trade Comm’n*, 75 F.3d 1545, (Fed. Cir. 1996)(held that qualitative terms without numerical limits were not indefinite); *Ecolab v. Envirochem, Inc.*, 264 F.3d 1358 (Fed. Cir. 2001)(stated that it is common to use relative terms to avoid a strict numerical boundary and that relative terms must construed using the same rules of construction as any other claim term).

That relative terms are not *per se* improper is also supported by the Manual of Patent Examining Procedure (MPEP). As provided in MPEP § 2173.05(b) entitled “Relative Terminology,” the MPEP states:

The fact that claim language, including terms of degree, may not be precise, does not automatically render the claim indefinite under 35 U.S.C. 112, second paragraph. *Seattle Box Co., v. Industrial Crating and Packing, Inc.*, 731 F.2d 818, 221 USPQ 568 (Fed. Cir. 1984). Acceptability of the claim language depends upon whether one of ordinary skill in the art would understand what is claimed, in light of the specification.

In view of the above, Applicant respectfully submits that its use of the term “substantially” is not indefinite and respectfully requests that the rejection be withdrawn.

As a further point, Applicant notes that Applicant’s specification provides an indication as to the meaning of “substantially” as used in the context of claim 40. For example, Applicant states:

Notably, in the initial stages of operation of the system 100, *i.e.* when emulation is first provided for the program, most execution is conducted by the interpreter/emulator 102 in that little or no code resides within (*i.e.*, has been emitted into) the code cache(s) of the DELI 108. However, in a relatively short amount of time, most if not all execution is conducted within the code cache(s) of the DELI 108 due to the emitting step (block 208). By natively executing code within the code cache(s), the overhead associated with interpreting and emulating is avoided (in that it has already been performed), thereby greatly increasing emulation efficiency.

[Applicant's specification, page 10, lines 18-25]

II. Claim Rejections - 35 U.S.C. § 103(a)

Each of Applicant's remaining claims has been rejected in under Buzbee, et al. ("Buzbee", U.S. Pat. No. 5,933,622) and Challenger, et al. ("Challenger", U.S. Pat. No. 6,256,712), either by themselves or in view of another reference.

As is identified above, however, each of Applicant's remaining independent claims (*i.e.*, claims 1 and 20) has been amended so as to render the rejections moot as having been drawn against the claims in previous form. Applicant submits that the claims are allowable in their present form and respectfully requests that the rejections be withdrawn.

Regarding independent claim 1, Applicant asserts that the prior art references, either alone or in combination, do not render obvious a method for executing a program written for an original computer system on a different host computer system, comprising: fetching original program instructions during execution of the program using an emulator, interpreting the original program instructions with the emulator to determine an underlying semantic function associated with the program instructions,

providing the program instructions from the emulator to a just-in-time compiler, growing a code fragment by adding the program instructions to the code fragment using the just-in-time compiler, dynamically translating the original program instructions with the just-in-time compiler to generate instructions that can be executed by the host computer system, dynamically emitting translated program instructions from the just-in-time compiler into at least one code cache of a dynamic execution layer interface of a virtual machine, and dynamically executing the translated instructions from the at least one code cache in lieu of the original program instructions when a semantic function of the original program instructions is requested.

Regarding independent claim 20, Applicant asserts that the prior art references, either alone or in combination, do not render obvious a system for executing program code that was written for an original computer system on a different host computer system, comprising: an emulator configured to fetch original program instructions during execution of a program and dynamically interpret the original program instructions to determine an underlying semantic function associated with the program instructions, a just-in-time compiler configured to receive the program instructions from the emulator, dynamically grow a code fragment by adding the program instructions to the code fragment, and dynamically translate the original program instructions into instructions that can be executed by the host computer system, a virtual machine that comprises a dynamic execution layer interface including a core having at least one code cache in which code fragments can be dynamically cached and executed, and an application programming interface that links the just-in-time compiler to the virtual machine, the application programming interface being configured to emit instructions that have been translated by the just-in-

time compiler to the code cache for execution of the translated instructions in lieu of the original program instructions.

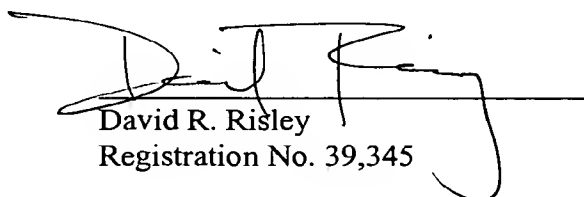
III. Canceled Claims

Claims 2-4, 8-19, 21, 22, and 30-36 have been canceled from the application without prejudice, waiver, or disclaimer. Applicant reserves the right to present these canceled claims, or variants thereof, in continuing applications to be filed subsequently.

CONCLUSION

Applicant respectfully submits that Applicant's pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

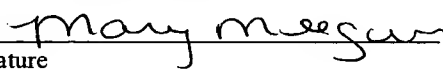
Respectfully submitted,



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5-31-05


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